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# INTERNATIONAL PRELIMINARY EXAMINATION REPORT



(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P16411-JOM	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP 03/07530	International filing date (day/month/year) 11.07.2003	Priority date (day/month/year) 19.07.2002
International Patent Classification (IPC) or both national classification and IPC H04L12/56		
Applicant TELEFONAKTIEBOLAGET LM ERICSSON et al.		

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 5 sheets, including this cover sheet.  
  
☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

- This report contains indications relating to the following items:
  - ☒ Basis of the opinion
  - ☐ Priority
  - ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
  - ☐ Lack of unity of invention
  - ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
  - ☐ Certain documents cited
  - ☐ Certain defects in the International application
  - ☐ Certain observations on the international application

Date of submission of the demand  27.01.2004	Date of completion of this report  15.09.2004
Name and mailing address of the international preliminary examining authority:   European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer  Perrier, S  Telephone No. +31 70 340-4245  

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/EP 03/07530

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-14 as published

**Claims, Numbers**

1-22 as published

**Drawings, Sheets**

1/4-4/4 as published

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).  
☐ the language of publication of the international application (under Rule 48.3(b)).  
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority in written form.  
☐ furnished subsequently to this Authority in computer readable form.  
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:  
☐ the claims, Nos.:  
☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY  
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International application No. **PCT/EP 03/07530**

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Yes: Claims	2-4,6,8-18,20,21
	No: Claims	1,5,7,19,22
Inventive step (IS)	Yes: Claims	2,3,8,11-13,17,18,20,21
	No: Claims	1,4-7,9,10,14-16,19,22
Industrial applicability (IA)	Yes: Claims	1-22
	No: Claims	

**2. Citations and explanations**

**see separate sheet**

**Re Item V**

**Reasoned statement under Art. 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Reference is made to the following document:

D1: EP-A-0 948 168 (ERICSSON TELEFON AB L M) 6 October 1999 (1999-10-06)

2. Independent claims 1, 19 and 22 are not allowable due to lack of novelty, Article 33(2) PCT, for the following reasons:

- 2.1 Claim 1:

The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and discloses (the references in parentheses applying to this document):

Method for selecting a window size for packet switched connection between a first and a second party, wherein a sending party uses a window based congestion control mechanism for avoiding or handling congestion on a communication path used for said connection (column 7, line 48 to column 8, line 12 and figure 3), a window size defining the maximum number of data packets that can be sent by a sending party before an acknowledgement of the reception of a packet is received by said sending party (column 1, line 53 to column 2, line 9), and wherein the following steps are performed when executing the method:

- retrieving information about a bit rate of a link belonging to a path across which the connection between the parties is set up (column 14, lines 22 to 32 and figure 8),
- retrieving information about an estimation of a round trip time on the connection between the parties (column 14, lines 33 to 50),
- determining an estimation of a pipe capacity for the connection between the parties according to the retrieved bit rate and the round trip time of the connection (column 16, lines 1 to 4 and figure 8),
- determining an upper threshold value for the window size based on the pipe capacity (column 16, lines 12 to 24), and
- selecting a window size value above zero and below or equal to the upper threshold value (column 16, lines 12 to 24).

**2.2 Claim 19:**

The document D1 is regarded as being the closest prior art to the subject-matter of claim 19, and discloses (the references in parentheses applying to this document):

Window size selecting unit for a communication system for connecting a first and a second party, wherein a sending party is adapted to use a window based congestion control mechanism for avoiding or handling congestion on a communication path used for said connection (column 7, line 48 to column 8, line 12 and figure 3), a window defining the maximum number of data packets that can be sent by a sender before an acknowledgement of the reception of a packet is received by the sender (column 1, line 53 to column 2, line 9), and wherein the window size selecting unit comprises an input/output unit for sending and receiving data (column 12, lines 26 to 38), a processing unit for controlling the other units (column 12, lines 15 to 25) and a selection unit for selecting a window size above zero and below or equal to an upper threshold value for a connection between the parties (column 16, lines 12 to 24).

**2.3 Claim 22:**

The document D1 is regarded as being the closest prior art to the subject-matter of claim 22, and discloses (the references in parentheses applying to this document):

Threshold value determining unit comprising an input/output unit (column 12, lines 26 to 38), a pipe capacity determining unit for determining a round trip time of a connection (column 14, lines 33 to 50) and a bit rate of said connection (column 14, lines 22 to 32 and figure 8) and for determining the pipe capacity of said connection from the round trip time and the bit rate (column 16, lines 12 to 24), and a processing unit for controlling the units (column 12, lines 15 to 25) and calculating an upper threshold value for further use in a window size selecting unit (column 16, lines 12 to 24).

3. The additional features of dependent claims 4-7, 9, 10, 14-16 do not add anything new or of inventive significance because they are either known from D1 (claims 5 and 7, see column 9, lines 8 to 22) or are common measures (claims 4, 6, 9, 10, 14, 15 and 16).